

Group Discussion: MoM and Scenarios

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Goals of group discussion

- Elicit how the draft CoBP might be
 - Added to
 - Subtracted from
 - Modified
- Identify steps that might be taken to further illuminate or clarify the subject
- Identify key issues that might be the subject of future SAS panels



Measures of Merit (MoM)



Five levels of MoM

MoPE: Measures of Policy Effectiveness

MoFE: Measures of Force Effectiveness

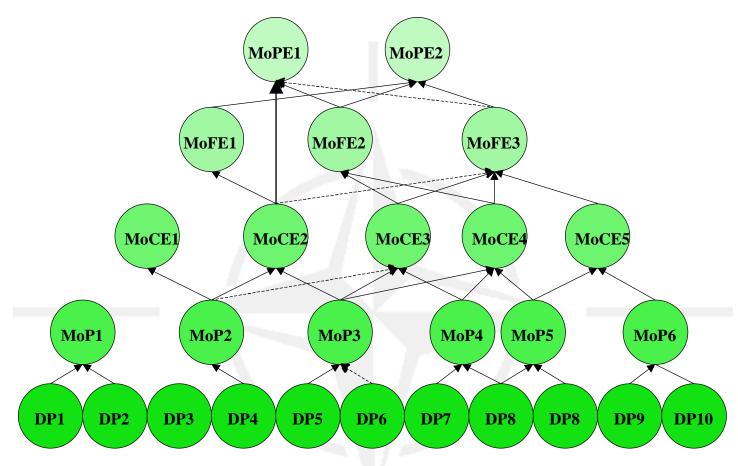
MoCE: Measures of C2 Effectiveness

MoP: Measures of Performance

DP: Dimensional Parameters



Linked MoMs



Can relationships be established?



MoM Characteristics

MoM	Focus	Scenario	Effort Required	Number	Impact	Compre- hension	Generaliz- ability
MoPE MoFE MoCE MoP	Outcome Mission C3I	Dependent	High ‡	Few	High ‡	Policy	Low
DP	Systems Process	Independent	Low	Many	Limited	Technical	High

Agree of disagree?



Conclusions

- No single measure or methodology exists for assessing overall effectiveness of C&C
- A multi-method, multi-phase approach is necessary

Agree or disagree?



Recommendations

- Plan with clear objectives
- State assumptions, constraints
- Formally assess reliability and validity
- Concentrate on MoCE and MoP
- Incorporate MoM data gathering into system design
- Include Subject Matter Experts in assessments
- Retain data as benchmarks for future comparison

Agree or disagree?



Challenges / Issues

- Linkage of DP-MoP-MoCE-MoFE
- Interpretation of measures
- Environmental components
- Reliability and validity
- Uncertainties scenario, model, outcomes
- Human-in-the-loop
- Cost and convenience
- Modelling



Summary MoM

- Comments?
- Questions?
- Areas of concern?



Scenarios



Four elements

- (geopolitical) context
- participants
- environment
- evolution of events in time

Any other?



Six prerequisites should be met

It should:

- be approved for the assessment
- reflect the factors that have significant impact on C2 needs
- stress C2 issues
- be military credible
- be credible in terms of civil-military objectives
- facilitate the design process

Necessary and sufficient?



Three C2 elements should be reflected

- C2 organisation and infrastructure, including human issues
- C2 processes
- C2 systems

Complete?



Conclusions

- The ideal OA is scenario independent.
- In practice, this is rarely the case
- Problem dictates the contents of a scenario
- There is no universal scenario
- Scenario is part of a larger methodology
- No single scenario is sufficient



Recommendations

- Organise set of scenarios/vignettes to cover problem
- create national base of approved scenarios
- explicitly identify scenarios prior to study
- information and hypotheses on threats, adversary forces and non-combatants should be addressed.
- Explicitly identify the C2 aspects under consideration
- Identify and document key scenario assumptions



Challenges

- Standards for judging applicability and accreditation
- Scenario's for coalition C2 assessment to be developed by team of participating nations



Summary Scenarios

- Comments?
- Questions?
- Areas of concern?





Group Discussion on "MoM and Scenarios"

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